

BRUHATH BANGALORE MAHANAGARA PALIKE**YELAHANKA ZONE ELECTRICAL DIVISION**

Name of the work :- Detaild estimate for Annual Maintenance and Repairs of Electrical Installation at J.C Yelahanka Zonal Office and bbmp building in Amrutahalli Byatarayanapura Constituency.

Budget Head: P0294

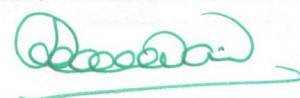
Division No.....

Estimate No.

Est Cost Rs. 1000000.00

Sl. No	SR Page No	Description	Unit	Qty	Rate	Amount
1	Labour Dept	Skilled Electrician Notification No. KAE 69 tWA 2022, dateds0-1,-2022 Minimum Wages With effect from 30-11.-2022. Minimum wages and VDA from 0L44-2024 to 3143-2025	Days	235	744.55	174969.25
2	Labour Dept	Assistant Technician Semi Skilled Notification No. KAE 69 tWA 2022, dateds0-1,-2022 Minimum Wages With effect from 30-11.-2022. Minimum wages and VDA from 0L44-2024 to 3143-2025	Days	235	715.27	168088.45
3	02/1.1.1 PWD Ele SR 2-23-24	Supplying heavy gauge PVC conduit pipe.....dia.....mm thick confirming to IS2509 with suitable size bends, junction boxes, adhesive paste etc, and fixing using inverted wood plugs incase of RCC ceiling and RCC wall/stone structure or rawl plugs incase of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. 19/20 mm dia 2 mm thick	m	70	69.00	4830.00
4	02/1.1.2 PWD Ele SR 2-23-24	Supplying heavy gauge PVC conduit pipe.....dia.....mm thick confirming to IS2509 with suitable size bends, junction boxes, adhesive paste etc, and fixing using inverted wood plugs incase of RCC ceiling and RCC wall/stone structure or rawl plugs incase of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. 25 mm dia 2 mm thick	m	60	81.00	4860.00
5	03/1.7.1 PWD Ele SR 2-23-24	Extra for Groove cutting in brickwall /CC floor to the suitable depth for concealing of Conduit/ GI pipe and plastering, finishing upto wall surface complete. upto 50 mm conduit in brick wall	m	40	29.00	1160.00
6	03/1.7.2 PWD Ele SR 2-23-24	Extra for Groove cutting in brickwall /CC floor to the suitable depth for concealing of Conduit/ GI pipe and plastering, finishing upto wall surface complete. upto 50 mm conduit CC floor	m	40	69.00	2760.00
7	03/1.8.2 PWD Ele SR 2-23-24	Supplying and fixing of PVC casing and capping on the wall or ceiling using necessary materials like bends, junction box, elbows, screws at an interval of 300 mm as required. 25 mm	m	100	35.00	3500.00
8	03/1.9.2 PWD Ele SR 2-23-24	Supplying PVC flexible conduit pipe....mm dia fixing on surface over inverted tape red wooden plugs or phill plugs or rawl plugs and clamped using heavy gauge saddles at an interval of 300mm using NF screws and on either end of the pipe terminated completely. 25 mm	m	50	22.00	1100.00
9	08/3.3.2 PWD Ele SR 2-23-24	Supplying and fixing surface /flush mounting unbreakable PVC modular box suitable for mounting modular switch plate swith due groove cutting in Brick /C.C wall, including necessary rawlplugs, Machine/NF screws etc., complete. 3 Way	Each	10	124.00	1240.00
10	08/3.3.4 PWD Ele SR 2-23-24	Supplying and fixing surface /flush mounting unbreakable PVC modular box suitable for mounting modular switch plate swith due groove cutting in Brick /C.C wall, including necessary rawlplugs, Machine/NF screws etc., complete. 6 Way	Each	20	173.00	3460.00
11	08/3.3.5 PWD Ele SR 2-23-24	Supplying and fixing surface /flush mounting unbreakable PVC modular box suitable for mounting modular switch plate swith due groove cutting in Brick /C.C wall, including necessary rawlplugs, Machine/NF screws etc., complete. 8 Way	Each	15	219.00	3285.00
12	08/3.5.2 PWD Ele SR 2-23-24	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/ PVC box. 3 Module	Each	10	161.00	1610.00

13	08/3.5.4 PWD Ele SR 2- 23-24	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/ PVC box.6 Module ✓	Each	20	234.00 ✓	4680.00 ✓
14	08/3.5.5 PWD Ele SR 2- 23-24	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/ PVC box.8 Module ✓	Each	15	284.00 ✓	4260.00 ✓
15	09/3.6.1 PWD Ele SR 2- 23-24	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.6A One Way Switch ✓	Each	50	102.00 ✓	5100.00 ✓
16	09/3.6.2 PWD Ele SR 2- 23-24	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.6A Two Way Switch ✓	Each	5	166.00 ✓	830.00 ✓
17	09/3.6.4 PWD Ele SR 2- 23-24	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.Stepped Fan Regulator Two Module ✓	Each	25	357.00 ✓	8925.00 ✓
18	09/3.6.7 PWD Ele SR 2- 23-24	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.16A One Way Switch ✓	Each	10	180.00 ✓	1800.00 ✓
19	09/3.6.8 PWD Ele SR 2- 23-24	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.6A Bell Push ✓	Each	10	177.00 ✓	1770.00 ✓
20	09/3.6.9 PWD Ele SR 2- 23-24	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.32A DP Switch ✓	Each	10	326.00 ✓	3260.00 ✓
21	09/3.6.10 PWD Ele SR 2- 23-24	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.6/16A Universal Socket ✓	Each	10	236.00 ✓	2360.00 ✓
22	05/2.3.1 PWD Ele SR 2- 23-24	Wiring for lighting /power circuit using one of FRLS PVC insulated 1100V grade,multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:2010.1 Sq mm ✓	m	350	19.00 ✓	6650.00 ✓
23	05/2.3.2 PWD Ele SR 2- 23-24	Wiring for lighting /power circuit using one of FRLS PVC insulated 1100V grade,multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:2010.1.5 Sq mm ✓	m	300	26.00 ✓	7800.00 ✓
24	05/2.3.4 PWD Ele SR 2- 23-24	Wiring for lighting /power circuit using one of FRLS PVC insulated 1100V grade,multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:2010.4 Sq mm ✓	m	100	63.00 ✓	6300.00 ✓
25	06/2.5.1 PWD Ele SR 2- 23-24	Supplying and drawing Flexible Multi core Cable manufacture dwith electrolytic grade flexible copper with low conductor confirming to IS8130-1984 and (Virgin) PVC insulation sheathed suitable for working voltage upto 1100 Volts as per IS-694:1990.2C x 1.5 Sq mm ✓	m	200	53.00 ✓	10600.00 ✓
26	06/2.5.9 PWD Ele SR 2- 23-24	Supplying and drawing Flexible Multi core Cable manufacture dwith electrolytic grade flexible copper with low conductor confirming to IS8130-1984 and (Virgin) PVC insulation sheathed suitable for working voltage upto 1100 Volts as per IS-694:1990.4C x 2.5 Sq mm ✓	m	50	148.00 ✓	7400.00 ✓
27	07/2.6.2 PWD Ele SR 2- 23-24	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to IS8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100 Volts as per IS-694:1990.3C x 4 Sqmm ✓	m	50	168.00 ✓	8400.00 ✓
28	13/5.1 PWD Ele SR 2- 23-24	Supplying push button operated direct online starter with an antiweld silver cadmiumoxide contactor with replaceable fixed and moving contacts and bimetallic thermal overload relay help in anticorrosion treated sheet steel or iron clad enclosure and fixing the same to suitable capacity wires for 230/440 V 1/3 phase motor upto 5 HP. ✓	Each	2	1927.00 ✓	3854.00 ✓
29	15/5.8.1 PWD Ele SR 2- 23-24	Supplying of Switch disconnector fuse unit (TPN)HRC type (but without HRC fuses). With AC-23A duty and as per IS- 13947. 63 A ✓	Each	2	2312.00 ✓	4624.00 ✓



30	15/5.8.2 PWD Ele SR 2- 23-24	Supplying of Switch disconnector fuse unit (TPN)HRC type (but without HRC fuses). With AC-23A duty and as per IS- 13947. 100 A	Each	4	4503.00	18012.00
31	15/5.9.2 PWD Ele SR 2- 23-24	Supplying and fixing HRC fuse units base on existing switch / panel board.32 to 63 A	Each	6	612.00	3672.00
32	16/5.13.2 PWD Ele SR 2- 23-24	Supply and fixing of 3 pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS- 13947.40 A	Each	3	2258.00	6774.00
33	16/5.14.6 CSR 23-24	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.100 A <u>95/100A</u>	Each	1	16606.00	16606.00
34	17/5.15.9 CSR 23-24	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit in Thermal Magnetic Release. Micro processor release shall have Earth Fault as per IS- 13947. (Icu=100% lcs). In 4P MCCB, all Poles should have protection for Short-Circuit/Over Load.For Microprocessor MCCBS Facility for segregating Priority and Non-Priority loads must be available in the MCCB. MCCB shall be provided with double insulation (insulation between front cover and internal power circuits to avoid any accidental contact with live current carrying path with the front cover open). Multi-pole breakers shall be designed to break all the poles simultaneously and they shall have a single mechanism.FOUR POLE100Amps 25kA.	Each	1	8487.00	8487.00
35	17/5.18.1 CSR 23-24	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.6-32Amps SP	Each	5	415.00	2075.00
36	17/5.18.4 CSR 23-24	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.6-32 Amps DP	Each	5	739.00	3695.00
37	17/5.18.8 CSR 23-24	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.40 Amps TPN	Each	2	3044.00	6088.00
38	30/6.3.1 CSR 23-24	Supplying capacitor type ceiling fan complete with down rod blades, shackle, canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374- 1979 and with double ball bearing system.48" Sweep (1200mm) Regular model	Each	20	2984.00	59680.00
39	30/6.5.1 CSR 23-24	Supplying wall mounting fan suitable to operate at single-phase 230v A.C. supply <u>400mm Sweep</u> <u>300mm Sweep</u>	Each	15	2492.00	37380.00
40	39/9.5.9 CSR 23-24	Supplying, installation, testing & commissioning of 12V DC, AH batteries in poly propylene container for U.P.S. Sealed maintenance free batteries.150 AH capacity	Each	1	15895.00	15895.00
41	32/6.14.2 CSR 23-24	Supplying installation testing and commissioning of heavy duty compressor suitable for window/split type <u>A/C.1 Ton</u> <u>1.5 Ton</u>	Each	4	14793.00	59172.00
42	32/6.15.2 CSR 23-24	Supply and fixing of condensing coil for Split Air Conditioners.1.5 Ton	Each	2	10100.00	20200.00
43	32/6.16.1 CSR 23-24	Supplying and fixing capacitor's (of approvedmake) forwindow /split air conditioners. 25 to 45mfd running capacitor.	Each	3	805.00	2415.00
44	32/6.18 CSR 23-24	Supplying and fixing the fan motor for blowers and condenser of 1/5 HP, single shaft/double shaft suitable for split /window air conditioners.	Each	2	6116.00	12232.00

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45	47/ 11.11.4 CSR 23-24	Supplying & fixing of retrofit type-LED bulb.....W with OPAL acrylic diffuser comprising of LED source with CCT6500 degree K,CRI>70%. efficacy>80 lumen per W, life>25000 burning hours and Compliance to IS 10322/ IEC60598, LM79 & LM80 .The LED are driven by HF electronic driver integrated in the system, with PF>0.95, power loss should.9W, 6500K ✓	Each	39	154.00 ✓	6006.00 ✓
46	47/ 11.11.6 CSR 23-24 ✓	Supplying & fixing of retrofit type-LED bulb.....W with OPAL acrylic diffuser comprising of LED source with CCT6500 degree K,CRI>70%. efficacy>80 lumen per W, life>25000 burning hours and Compliance to IS 10322/ IEC60598, LM79 & LM80 .The LED are driven by HF electronic driver integrated in the system, with PF>0.95, power loss should.15W, 6500K ✓	Each	22	326.00 ✓	7172.00 ✓
47	43/11.3.2 CSR 23-24	Supplying of feet -PVC Batten with integrated LED tube W with high quality diffuser with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V@ 50/60Hz & Power factor >0.9 along with CE approved. 2 years Warranty against any manufacturing defect working under standard electrical condition.LED light fitting 1 x 4' - 20/22 W ✓	Each	25	690.00 ✓	17250.00 ✓
48	44/11.4. 3 CSR 23-24	Supplying of recess mounting non integrated type LED down light W luminaire comprising of pressure decast/ extruded aluminium housing, with spring loaded false ceiling clamps, LED of Power/COB with CCT 6500 degree K, CRI> 70%. efficacy >100 lumen per watt, 120degree beam spread, life> 25000 burning hours and Compliance to IS 10322/IEC 60598, LM 79 & LM 80. The lamp compartment is enclosed with anti glare opal diffuser which enhances the lighting level. LEDs are driven by HF electronic driver integrated in a separate control gear assembly., with PF > 0.95, power loss should < 5% of lamp wattage., short circuit & open circuit protection to be integrated in the circuit, THD less than 20%, Life as per LM 79. The operating input voltage should be between 130 to 275 volts. BIS Approved and Tested by NABL/CPRI accredited laboratory with 2 years Warranty against any manufacturing defect working under standard electrical condition.15-18W ✓	Each	15	1671.00 ✓	25065.00 ✓
49	44/11.5.3 CSR 23-24	Supply of round/square recess/surface mounted rolling type LED Down light with W GU 10 LED Lamp Rib Fabricated from Die cast aluminium with white powder coated prewired to mains connector & has swiveling unit of aluminium die cast eye ball & LED Lamp position retained by circular wire spring, with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V @ 50/60Hz & Power factor >0.9 along with CE approved. 2 years Warranty against any manufacturing defect working under standard electrical condition LED square or round down light 15-18W ✓	Each	10	1324.00 ✓	13240.00 ✓
50	48/12.1 CSR 23-24	Supplying and fixing one of 230 volts bell or buzzer and a flush type bell push with gang box fixed on necessary wooden or rawl plugs using NF screws. ✓	Each	5	189.00 ✓	945.00 ✓
51	48/12.2.2 CSR 23-24	Supplying and fixing one of 230 V Ding dong bell and a flush type bell push with gang box fixed on necessary wooden or rawl plugs using NF screws with Remote.Musical ✓	Each	3	434.00 ✓	1302.00 ✓
52	48/12.2.3 CSR 23-24	Supplying and fixing one of 230 V Ding dong bell and a flush type bell push with gang box fixed on necessary wooden or rawl plugs using NF screws with Remote.Remote ✓	Each	3	1190.00 ✓	3570.00 ✓
53	48/12.4.3 CSR 23-24	Rewinding a ... mm ceiling fan/after using necessary gauge annealed and insulated copper wire with necessary insulating, separators vibration arresting shellac,etc including replacement of bearings if any transportation to and from the spot to workshop inclusive of releasing the refixing.1200MM ✓	Each	10	765.00 ✓	7650.00 ✓



54	49/12.20 CSR 23-24	Supplying and fixing of T8 36/40W Fluorescent Tube with 36W power consumption with initial lumen of 2750 (3000 deg K / 4000 deg K) with rated avg life of greater than 10000 hrs. Operating voltage range from 180V to 265V. 50Hz AC power Supply ✓	Each	20	63.00	1260.00 ✓
55	50/12.23 CSR 23-24	Supplying and fixing of 20/40 Watts heavy duty open construction Ferromagnetic copper ballast for fluorescent tubes : Supplying and fixing of 20/40 Watts heavy duty open construction Ferromagnetic copper ballast for fluorescent tubes, Class H Insulated copper wire, Vacuum impregnated high quality with Low loss silicon steel lamination operated on 240V, 50Hz supply with IEC 60920 (Safety) & IEC 60921 (Performance). Operating voltage range from 180V to 265V, 50Hz AC power Supply. ✓	No	15	293.00	4395.00 ✓
56	53/12.51.3 CSR 23-24	Supplying & fixing LED Drivers suitable for 5700K LED fitting Indoor Fixtures. Operating voltage range from 180V to 265V, 50Hz AC power Supply 9W to 12W 5700K suitable for indoor LED fitting. ✓	Each	10	420.00	4200.00 ✓
57	53/12.51.4 CSR 23-24	Supplying & fixing LED Drivers suitable for 5700K LED fitting Indoor Fixtures. Operating voltage range from 180V to 265V, 50Hz AC power Supply 15W to 18W 5700K suitable for indoor LED fitting. ✓	Each	8	611.00	4888.00 ✓
58	21.06 13/32.08 CSR 2023-24	Laying of cable in Existing Trench/GI pipe/Stone Ware/RCC Hume pipe using Wooden/Aluminum Rollers as directed by the departmental staff LT Cable 35 to 95 Sqmm ✓	KM	0.10	31139.00	3113.90 ✓
59	13/32.09 CSR 2023-24	1.1 kV, XLPE or Heat resistant PVC insulated, PVC extruded Inner Seath Armoured LTUG Cable as per IS-1554 (Part 1) or IS-7098 Part-1, Armouring strip thickness and resistivity as per IS-3975.25 Sqmm, 35 Sqmm, 3.5 Core, (14 GI Strips - 4 x 0.8 mm) ✓	KM	0.10	154062.00	15406.20 ✓
Total Rs						847321.80
Add 18 % GST on Total						152517.92
Misscellaneous charges						160.28
TOTAL						1000000.00

CERTIFICATE

1. The Place was inspected and work is essential.
2. The Provision made in the estimate is adequate and are necessary.
3. The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
4. The rates in the Estimate is based on PWD(Elec) SR of 2022-23 and Approved Rate.

Asst. Engineer (Elec)

Asst. Exe. Engineer (Elec)
Sub-Division No.

Bruhat Bangalore Mahanagara Palike

EXECUTIVE ENGINEER (ELEC)

YELAHANKA DIVISION

BRUHAT BANGALORE MAHANAGARA PALIKE

Administrative Sanction for Rs. 10,00,000.00

TEN LAKHS ONLY

is accorded under head
20294. Mand R to Elec
RICAL Installations in BBMP
Buildings, Schools, M. Homes

Registered as EE No. 36/2024-25 Subject

to conditions contained in enclosed memo
No. BBMP/EE/Elec/42/AS/36/24-25

Dt 07.01.2025

Executive Engineer

TECHNICALLY SANCTIONED FOR Rs. 10,00,000.00

Rupees TEN LAKHS ONLY

Under 20294. Mand R to Elec
RICAL Installations in BBMP Buildings

Registered as EE No. 10/2024-25

Subject to conditions contained in
enclosed memo No. BBMP/EE/Elec/42/AS/36/24-25

Dt 07.01.2025

BBMP/EE/Elec/42/AS/36/24-25

Dated 07.01.2025 for 10,00,000.00

Executive Engineer